

ST. JOHNS COUNTY UTILITY DEPARTMENT (SJCUD) GENERAL NOTES

GENERAL:

1. ALL UNDERGROUND UTILITY EQUIPMENT, MATERIALS, AND INSTALLATION SHALL BE IN ACCORDANCE WITH THE LATEST REVISION OF THE ST JOHNS COUNTY UTILITY DEPARTMENT (SJCUD) MANUAL OF WATER, WASTEWATER, AND REUSE STANDARDS MANUAL & DETAILS, ALL APPLICABLE FEDERAL, STATE, AND LOCAL REGULATIONS, AND THE APPROVED SITE PLANS. WHERE THESE NOTES CONFLICT WITH THE SPECIFICATIONS IN PART III OF THE MANUAL, PART III GOVERNS.
2. SHOP DRAWINGS SHALL BE SUBMITTED IN ACCORDANCE WITH 1.4.1.2.
3. A PRE-CONSTRUCTION MEETING IS REQUIRED WITH THE DEVELOPER, THE ENGINEER OF RECORD (EOR), THE UTILITY CONTRACTOR, AND SJCUD PRIOR TO THE START OF ANY CONSTRUCTION IN ACCORDANCE WITH 1.4.1.3. A PRE-CONSTRUCTION MEETING WITH SJCUD IS REQUIRED REGARDLESS OF OTHER AGENCIES' REQUIREMENTS.
4. ALL WATER, SEWER, AND/OR REUSE CONSTRUCTION SHALL BE PERFORMED BY A CONTRACTOR LICENSED UNDER THE PROVISIONS OF CHAPTER 489, FLORIDA STATUTES. A COPY OF THE CONTRACTOR'S GENERAL LICENSE AND/OR UNDERGROUND UTILITY LICENSE SHALL BE PROVIDED AT THE PRE-CONSTRUCTION MEETING.
5. THE CONTRACTOR IS RESPONSIBLE FOR INSPECTING THE SITE PRIOR TO CONSTRUCTION.
6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR FIELD VERIFICATION OF ALL LOCATIONS AND ELEVATIONS PRIOR TO COMMENCEMENT OF CONSTRUCTION. VERTICAL LOCATIONS OF ALL UTILITIES (INCLUDING EXISTING STORM SEWERS, GAS, INTERNET, ETC.) SHALL BE SHOWN ON PLAN AND PROFILE SHEETS. CONTRACTOR SHALL EXERCISE CAUTION DURING EXCAVATION NEAR EXISTING UTILITIES SHOWN ON THE PLANS AND NOTIFY THE EOR AND SJCUD IF LOCATION DIFFERS FROM THAT SHOWN ON THE PLANS BEFORE CONTINUING WITH CONSTRUCTION.
7. THE CONTRACTOR(S) SHALL LOCATE, VERIFY, AND IDENTIFY ALL EXISTING UTILITIES AND UNDERGROUND UTILITIES SHOWN ON THE PLANS PRIOR TO ANY EXCAVATING ACTIVITIES AND TAKE ALL MEASURES NECESSARY TO PROTECT UTILITIES DURING CONSTRUCTION. SHOULD ANY UTILITY LINE OR COMPONENT BECOME DAMAGED OR REQUIRE RELOCATION, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE AFFECTED UTILITY COMPANY, EOR, COUNTY, AND SJCUD.
8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO EXISTING UTILITIES CAUSED BY HIS OPERATIONS. ANY DAMAGE SHALL BE REPLACED/REPAIRED BY THE CONTRACTOR AT NO ADDITIONAL EXPENSE TO THE OWNER.
9. THE WATER, SEWER, AND/OR REUSE SYSTEM SHALL BE CONSTRUCTED IN ACCORDANCE WITH SJCUD APPROVED CONSTRUCTION DRAWINGS AND SPECIFICATIONS. IF THERE IS ANY DEVIATION FROM THE APPROVED CONSTRUCTION DRAWINGS OR SPECIFICATIONS, WITHOUT PRIOR AUTHORIZATION AND CONSENT FROM SJCUD, THE CONTRACTOR MAY HAVE TO REMOVE THE DEVIATION AND RESTORE IT TO THE APPROVED CONSTRUCTION DRAWING CONFIGURATION AT NO EXPENSE TO SJCUD. ANY DEVIATIONS FROM THE APPROVED DOCUMENTS MAY DELAY THE COC SUBMITTAL PROCESS.
10. THE CONTRACTOR SHALL FIELD VERIFY THE CONNECTION POINTS PRIOR TO THE COMMENCEMENT OF CONSTRUCTION. ALL DISCREPANCIES SHALL BE REPORTED TO THE EOR AND SJCUD IMMEDIATELY.
11. EXISTING UTILITIES SHOWN ON THESE PLANS HAVE BEEN LOCATED PER AVAILABLE MEANS.
12. THE CONTRACTOR SHALL PROTECT SURVEY MARKERS, MONUMENTS, ETC. DURING CONSTRUCTION. THE CONTRACTOR SHALL RESTORE/REPLACE, AT NO ADDITIONAL EXPENSE TO THE OWNER, ANY DAMAGE DONE BY CONSTRUCTION ACTIVITIES IN ACCORDANCE WITH 3.1.1.
13. THE CONTRACTOR SHALL COORDINATE ALL CONSTRUCTION AND BUILDING PLACEMENT WITH ALL OTHER UTILITIES' CONSTRUCTION.
14. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVAL AND DISPOSAL OF ANY UNSUITABLE MATERIAL. FURNISHING AND COMPACTING SUITABLE REPLACEMENT BACKFILL MATERIAL SHALL BE IN ACCORDANCE WITH 3.3.4 AND 3.3.9.
15. MATERIALS UNDER WATER, SEWER, AND/OR RECLAIMED MAINS SHALL BE REMOVED AND REPLACED WITH SELECTED BACKFILL IN ACCORDANCE WITH 3.3.8.C THE CONTRACTOR(S) SHALL NOTIFY ALL APPLICABLE UTILITY COMPANIES, THE EOR, AND THE PROPERTY OWNER AT LEAST THREE (3) BUSINESS DAYS PRIOR TO INITIATING ANY EXCAVATION ACTIVITIES, OR AS SPECIFIED BY THE UTILITY COMPANIES AND THE PERMITS OBTAINED FOR THE WORK.
16. THE EOR AND SJCUD REQUIRE FIVE (5) BUSINESS DAYS NOTICE OF ALL REQUESTED MEETINGS AND/OR TESTING MEASURES RELATED TO THE PROJECT.
17. ANY LANDSCAPING TREES SHALL BE PLACED A MINIMUM OF 7.5 FEET AWAY FROM THE EDGE OF PIPELINE TO THE TREE CENTERLINE, IN ACCORDANCE WITH 2.2.3.
18. ALL ROCK AND UNSUITABLY SIZED STONES (AS DESCRIBED IN APPLICABLE AWWA AND SJCUD STANDARDS AND/OR PIPE MANUFACTURER'S RECOMMENDED INSTALLATION PROCEDURES) FOUND IN TRENCHES FOR NEW AND RELOCATED PIPE SHALL BE REMOVED TO A DEPTH OF AT LEAST SIX (6) INCHES BELOW THE BOTTOM OF THE PIPE. CONTINUOUS AND UNIFORM BEDDING SHALL BE PROVIDED FOR NEW AND RELOCATED PIPES. THE BACKFILL MATERIAL SHALL BE TAMPED IN LAYERS AROUND THE NEW AND RELOCATED PIPES AND TO A SUFFICIENT HEIGHT ABOVE SUCH PIPE TO ADEQUATELY SUPPORT AND PROTECT THE PIPE.
19. FOR WATER, WASTEWATER, AND RECLAIMED MAINS, THE MINIMUM AND MAXIMUM COVER SHALL BE 36" to 54", OR AS REQUIRED WITHIN FDOT OR RAILROAD RIGHTS-OF-WAY, IN ACCORDANCE WITH 2.2.10. EXCEPTIONS MAY BE MADE FOR CONFLICTS.
20. CONTRACTOR IS RESPONSIBLE FOR PROPER NOTIFICATION OF INSPECTING AUTHORITIES BEFORE AND DURING CONSTRUCTION AND SHALL SCHEDULE INSPECTIONS IN ACCORDANCE WITH 1.4.2.2.

NOTICE OF PROCEDURE:

1. ALL COMMERCIAL BUILDING PERMITS AND METERS PROCESSED THROUGH SJCUD CUSTOMER SERVICE SHALL BE ACCOMPANIED BY A SET OF APPROVED DESIGN PLANS.
2. ALL CONNECTIONS TO THE WATER, SEWER, AND/OR RECLAIMED SYSTEM, AND/OR FLUSHING AND PRESSURE TESTS TO BE PERFORMED BY THE UTILITY CONTRACTOR MUST BE SCHEDULED WITH SJCUD AT LEAST FIVE (5) BUSINESS DAYS IN ADVANCE. AN SJCUD INSPECTOR MUST BE PRESENT PRIOR TO THE CONNECTION BEING MADE OR TESTING IN ACCORDANCE WITH 1.4.2.2.
3. IT IS THE EOR'S RESPONSIBILITY TO OBTAIN APPLICABLE PERMITS PRIOR TO CONSTRUCTION.
4. THE PROPERTY OWNER SHALL PURCHASE THE WATER METER THROUGH SJCUD ON PROJECTS THAT REQUIRE A WATER METER LARGER THAN TWO INCHES (2"). THE OWNER'S CONTRACTOR SHALL INSTALL METERS THREE INCHES (3") AND LARGER.
5. WATER, SEWER, AND/OR RECLAIMED CONNECTION FEES SHALL BE PAID IN FULL PRIOR TO ANY METERS BEING PLACED IN ACCORDANCE WITH 1.4.1.4.
6. ALL SJCUD REQUIREMENTS SUCH AS FINAL INSPECTION, CORRECTION OF PUNCH LIST ITEMS, PROVIDING AS-BUILT DRAWINGS, FDEP CERTIFICATION OF COMPLETION, ETC. MUST BE SATISFIED PRIOR TO ISSUANCE OF CERTIFICATES OF OCCUPANCY.

PRESSURE PIPE NOTES:

1. POTABLE AND RECLAIMED WATERMANS AND FORCEMANS 4" THROUGH 16" DIAMETER SHALL BE DR18, C900 PVC, WITH PUSH-ON AND GASKETED JOINTS, OR DR11, C906, HDPE, OR DR18 FUSIBLE PVC (FPVC). POTABLE AND RECLAIMED WATERMANS 4" THROUGH 12" DIAMETER MAY BE DI CLASS 350 PIPE WITH PUSH-ON AND GASKETED JOINTS MAY BE RESTRAINED. FUSIBLE PVC SHALL NOT BE USED FOR HDD.
2. POTABLE AND RECLAIMED WATERMANS AND FORCEMANS 20" THROUGH 36" DIAMETER SHALL BE DR25 PVC WITH PUSH-ON AND GASKETED JOINTS OR DR11, C906, HDPE, OR DR25 FPVC. POTABLE AND RECLAIMED WATERMANS 20" THROUGH 36" DIAMETER SHALL BE DI CLASS 250 PIPE WITH PUSH-ON AND GASKETED JOINTS. FUSIBLE PVC SHALL NOT BE USED FOR HDD.
3. POTABLE AND RECLAIMED WATERMANS LARGER THAN 36" DIAMETER SHALL BE DR25 PVC OR DI CLASS 150 PIPE. FORCEMANS LARGER THAN 36" DIAMETER SHALL BE DR25 PVC.
4. HDD UP TO 36" DIAMETER AND LESS THAN 300 FEET SHALL BE DR11, C906 HDPE. HDD UP TO 24" DIAMETER AND LONGER THAN 1000 FEET SHALL BE DR9, C906 HDPE.
5. 2" POTABLE AND RECLAIMED WATERMANS AND FORCEMANS SHALL BE DR9, HDPE (CTS).
6. PIPE SHALL BE APPROPRIATELY COLOR CODED: BLUE-POTABLE WATER, GREEN-SEWER, AND PURPLE-RECLAIMED WATER.
7. WHERE WATERMANS, FORCEMANS, AND RECLAIMED WATERMANS ARE INSTALLED WITHOUT FITTINGS, THE MAXIMUM DEFLECTION ALLOWED SHALL BE 80% OF THAT RECOMMENDED BY THE MANUFACTURER IN ACCORDANCE WITH 3.4.2.A.7.
8. FITTINGS SHALL BE USED AT LOCATIONS INDICATED ON THE PLANS UNLESS OTHERWISE APPROVED BY THE EOR. ALL FITTINGS SHALL BE RESTRAINED PER THE RESTRAINED JOINT TABLE IN THE APPROVED PLAN SET.
9. ALL UNDERGROUND VALVES SHALL BE INSTALLED WITH AN ADJUSTABLE VALVE BOX WITH TOP SET TO FINAL GRADE IN ACCORDANCE WITH SJCUD DETAILS AND SPECIFICATIONS. VALVES SHALL HAVE LOCATE MARKERS IN ACCORDANCE WITH 3.8.7.

HYDROSTATIC TESTING NOTES:

AFTER ALL PRESSURE PIPES ARE INSTALLED, THE JOINTS COMPLETED, AND THE TRENCH BACKFILLED, THE NEWLY INSTALLED PIPE AND APPURTENANCES SHALL BE SUBJECTED TO A HYDROSTATIC TEST IN ACCORDANCE WITH 1.4.2.5. THE EOR AND SJCUD MUST BE NOTIFIED AT LEAST THREE (3) BUSINESS DAYS BEFORE A TEST IS TO BE PERFORMED. ANY LEAKS DETECTED SHALL BE CORRECTED AND THE SECTION OF PIPELINE RETESTED. THE TWO HOUR TEST PERIOD SHALL BEGIN WHEN ALL JOINTS HAVE BEEN DETERMINED TO BE WATER TIGHT. LEAKAGE SHALL BE LIMITED TO THAT ALLOWANCE SET FORTH IN SECTION 4 OF AWWA STANDARD C600 LATEST EDITION. HYDROSTATIC AND LEAKAGE TEST AND BLOW-DOWN (ZEROING OF GAUGE) MUST OCCUR BEFORE SAMPLING FOR BACTERIOLOGICAL TEST. THE MAXIMUM ALLOWABLE PRESSURE LOSS IS 5 PSI.

POTABLE WATER SYSTEMS NOTES:

1. CURB STOPS ARE TO BE BALL-TYPE WITH LOCKING CAPACITY, 1" MINIMUM.
2. A FULL UN CUT LENGTH OF WATERMAIN PIPE (USUALLY 20 FEET) SHALL BE CENTERED AT THE POINT OF CROSSING OF ALL RECLAIMED WATER AND SEWER (INCLUDING STORM) LINES AT THE POINT OF CROSSINGS REGARDLESS OF THE VERTICAL SEPARATIONS. IN ACCORDANCE WITH 2.2.2.C.
3. UTILITY CROSSINGS SHALL COMPLY WITH FDEP REGULATIONS (CH. 62-555.314, FAC).
4. WHERE SOLVENT CONTAMINATION IS FOUND IN THE TRENCH, WORK WILL BE STOPPED AND THE PROPER AUTHORITIES NOTIFIED. WITH THE APPROVAL OF THE ST. JOHNS COUNTY HEALTH DEPARTMENT, DUCTILE IRON PIPE, FITTINGS AND APPROVED SOLVENT RESISTANT GASKET MATERIAL SHALL BE USED IN THE CONTAMINATED AREA. THE DUCTILE IRON PIPE WILL BE WRAPPED IN POLYETHYLENE AND EXTEND AT LEAST 100 FEET BEYOND ANY DISCOVERED CONTAMINATION.
5. NO CONNECTION TO EXISTING POTABLE WATER SYSTEM SHALL BE ALLOWED UNTIL ALL PROPOSED WATERMANS HAVE BEEN PRESSURE TESTED, DISINFECTED, CLEARED FOR SERVICE BY FDEP AND ACCEPTED FOR MAINTENANCE BY SJCUD.
6. JUMPER CONNECTIONS WITH BACKFLOW PREVENTION DEVICE SHALL BE USED TO FILL OR FLUSH WATERMANS.
7. ALL NEW AND RELOCATED WATERMAIN PIPE, FITTINGS, VALVES, AND FIRE HYDRANTS SHALL BE IN CONFORMANCE WITH APPLICABLE AMERICAN WATER WORKS ASSOCIATION (AWWA) AND SJCUD STANDARDS.
8. ALL NEW AND RELOCATED WATERMAIN PIPE, FITTINGS AND VALVES WILL COMPLY WITH THE LATEST FDEP AND AWWA STANDARDS FOR LEAD CONTENT.
9. ALL NEW AND RELOCATED WATERMANS SHALL BE PRESSURE TESTED AND LEAKAGE TESTED IN ACCORDANCE WITH 1.4.2.5.
10. ALL NEW AND RELOCATED WATERMANS SHALL BE DISINFECTED IN ACCORDANCE WITH 1.4.2.6.
11. ALL NEW AND RELOCATED WATER SERVICES SHALL BE IN CONFORMANCE WITH THE STATE PLUMBING CODE AND SJCUD STANDARDS.
12. THE BACTERIOLOGICAL SAMPLE POINTS SHALL BE INDICATED ON DRAWINGS. THE SAMPLE POINT NUMBERING AND STATIONING SHALL CORRESPOND TO THOSE ON THE BACTERIOLOGICAL SAMPLE CHAIN OF CUSTODY FORMS.

WASTEWATER SYSTEM NOTES:

1. AN APPROVED INTERIOR LINER IS REQUIRED ON RECEIVING MANHOLES, PUMP STATION WETWELLS, AND MANHOLES WITH THREE OR MORE INVERTS, IN ACCORDANCE WITH 3.15.3.
2. SANITARY SEWER LINES SHALL BE GREEN, SDR26 PIPE, AND CLEARLY MARKED ON THE PIPE.
3. THE CONTRACTOR SHALL SUBMIT TO THE EOR AND SJCUD ALL VIDEO LOGS, WRITTEN REPORTS, AND DEFLECTION TEST RESULTS FOR REVIEW AND APPROVAL, IN ACCORDANCE WITH 1.4.3.2.
4. THE CONTRACTOR SHALL CONTACT SJCUD PRE-TREATMENT DEPARTMENT AT (904) 209-2663 FOR INSPECTION AFTER INSTALLATION OF GREASE TRAPS, INTERCEPTORS, AND/OR OIL-WATER SEPARATORS, IN ACCORDANCE WITH 2.14.

AS-BUILT DRAWINGS:

1. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PRODUCE, SUBMIT, AND OBTAIN APPROVAL OF REPRODUCIBLE AS-BUILT DRAWINGS FROM JURISDICTIONAL AGENCIES AS MAY BE REQUIRED IN ACCORDANCE WITH 1.4.3.12.
2. AS-BUILT INFORMATION SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR WHO SHALL EMPLOY A SURVEYOR REGISTERED IN THE STATE OF FLORIDA. UPON COMPLETION OF THE WORK, THE CONTRACTOR SHALL PROVIDE TWO (2) PAPER COPIES, A PDF, AND THE AUTOCAD FILES OF AS-BUILT DRAWINGS TO THE EOR.
3. A MINIMUM OF FIVE (5) BUSINESS DAYS PRIOR TO THE FINAL INSPECTION, TWO (2) SETS OF PRELIMINARY AS-BUILT DRAWINGS AND A COPY ON A USB DRIVE IN AUTOCAD FORMAT SHOWING THE REQUIRED INFORMATION SHALL BE SUBMITTED TO THE EOR.
4. THE RECORD OR AS BUILT DRAWINGS TO BE PREPARED BY THE CONTRACTOR AND SUBMITTED AT THE TIME OF THE REQUEST FOR A LETTER OF RELEASE TO PLACE THE CONSTRUCTION INTO SERVICE WILL CLEARLY DEPICT THE VERTICAL CLEARANCES BETWEEN WATER, SEWER (INCLUDING STORM), AND RECLAIMED LINES AT ALL CROSSING AND PARALLEL RUNS WHERE THE HORIZONTAL SEPARATION IS LESS THAN 10 FEET. IN ADDITION, THE CENTERING OF UN CUT LENGTHS OF PIPE (USUALLY 20 FEET) AT POINTS OF CROSSINGS WILL BE DOCUMENTED ON THE DRAWINGS AND ALL MITIGATING CONSTRUCTION MEASURES CLEARLY DEPICTED IN CASES WHERE A MINIMUM OF 18 INCHES OF VERTICAL CLEARANCE BETWEEN THE WATER AND SEWER (INCLUDING STORM) LINES IS NOT POSSIBLE.
5. AFTER SJCUD HAS APPROVED PRELIMINARY AS-BUILT PLANS, TWO (2) SETS OF BLACK LINE, SIGNED AND SEALED DRAWINGS, AND A COPY ON A USB DRIVE IN AUTOCAD FORMAT SHOWING THE REQUIRED INFORMATION SHALL BE SUBMITTED TO SJCUD.

STANDARD WATER/SEWER/RECLAIMED WATER SEPARATION:

THE CONTRACTOR SHALL INSTALL ALL MAINS IN ACCORDANCE WITH 2.2.2 AND THE REQUIREMENTS OF RULE 62-555.314, FAC, BELOW. THE CONTRACTOR SHALL NOTIFY SJCUD IN ANY INSTANCE WHERE THE FOLLOWING REQUIREMENTS CANNOT BE MET PRIOR TO INSTALLATION OF PIPE.

"62-555.314 LOCATION OF PUBLIC WATER SYSTEM MAINS. FOR THE PURPOSE OF THIS SECTION, THE PHRASE "WATERMANS" SHALL MEAN MAINS, INCLUDING TREATMENT PLANT PROCESS PIPING, CONVEYING EITHER RAW, PARTIALLY TREATED, OR FINISHED DRINKING WATER; FIRE HYDRANT LEADS; AND SERVICE LINES THAT ARE UNDER THE CONTROL OF A PUBLIC WATER SYSTEM AND THAT HAVE AN INSIDE DIAMETER OF THREE INCHES OR GREATER.

STANDARD WATER/SEWER/RECLAIMED WATER SEPARATION (CONTINUED):

1. HORIZONTAL SEPARATION BETWEEN UNDERGROUND WATERMANS AND SANITARY OR STORM SEWERS, WASTEWATER OR STORM WATER FORCEMANS, RECLAIMED WATERMANS, AND ON-SITE SEWAGE TREATMENT AND DISPOSAL SYSTEMS:
 - 1.1. NEW OR RELOCATED, UNDERGROUND WATERMANS SHALL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST THREE FEET BETWEEN THE OUTSIDE OF THE WATERMAIN AND THE OUTSIDE OF ANY EXISTING OR PROPOSED STORM SEWER, STORM WATER FORCEMAIN, OR RECLAIMED WATERMANS REGULATED UNDER PART OF CHAPTER 62-610, F.A.C.
 - 1.2. NEW OR RELOCATED, UNDERGROUND WATERMANS SHALL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST THREE FEET, AND PREFERABLY TEN FEET, BETWEEN THE OUTSIDE OF THE WATERMAIN AND THE OUTSIDE OF ANY EXISTING OR PROPOSED VACUUM-TYPE SANITARY SEWER.
 - 1.3. NEW OR RELOCATED, UNDERGROUND WATERMANS SHALL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST SIX FEET, AND PREFERABLY TEN FEET, BETWEEN THE OUTSIDE OF THE WATERMAIN AND THE OUTSIDE OF ANY EXISTING OR PROPOSED GRAVITY- OR PRESSURE-TYPE SANITARY SEWER, WASTEWATER FORCEMAIN, OR RECLAIMED WATERMANS NOT REGULATED UNDER PART OF CHAPTER 62-610, F.A.C. THE MINIMUM HORIZONTAL SEPARATION DISTANCE BETWEEN WATERMANS AND GRAVITY-TYPE SANITARY SEWERS SHALL BE REDUCED TO THREE FEET WHERE THE BOTTOM OF THE WATERMAIN IS LAID AT LEAST SIX INCHES ABOVE THE TOP OF THE SEWER.
 - 1.4. NEW OR RELOCATED, UNDERGROUND WATERMANS SHALL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST TEN FEET BETWEEN THE OUTSIDE OF THE WATERMAIN AND ALL PARTS OF ANY EXISTING OR PROPOSED "ON-SITE SEWAGE TREATMENT AND DISPOSAL SYSTEM" AS DEFINED IN SECTION 381.0065(2), F.S., AND RULE 64E-6.002, F.A.C.
2. VERTICAL SEPARATION BETWEEN UNDERGROUND WATERMANS AND SANITARY OR STORM SEWERS, WASTEWATER OR STORM WATER FORCEMANS, AND RECLAIMED WATER PIPELINES:
 - 2.1. NEW OR RELOCATED, UNDERGROUND WATERMANS CROSSING ANY EXISTING OR PROPOSED GRAVITY-OR VACUUM-TYPE SANITARY SEWER OR STORM SEWER SHALL BE LAID SO THE OUTSIDE OF THE WATERMAIN IS AT LEAST SIX INCHES, AND PREFERABLY 12 INCHES, ABOVE OR AT LEAST 12 INCHES BELOW THE OUTSIDE OF THE OTHER PIPELINE. HOWEVER, IT IS PREFERABLE TO LAY THE WATERMAIN ABOVE THE OTHER PIPELINE.
 - 2.2. NEW OR RELOCATED, UNDERGROUND WATERMANS CROSSING ANY EXISTING OR PROPOSED PRESSURE-TYPE SANITARY SEWER, WASTEWATER OR STORM WATER FORCEMAIN, OR RECLAIMED WATERMAIN SHALL BE LAID SO THE OUTSIDE OF THE WATERMAIN IS AT LEAST 12 INCHES ABOVE OR BELOW THE OUTSIDE OF THE OTHER PIPELINE. HOWEVER, IT IS PREFERABLE TO LAY THE WATERMAIN ABOVE THE OTHER PIPELINE.
 - 2.3. AT THE UTILITY CROSSINGS DESCRIBED IN PARAGRAPHS (A) AND (B) ABOVE, ONE FULL LENGTH OF WATERMAIN PIPE SHALL BE CENTERED ABOVE OR BELOW THE OTHER PIPELINE. SO THE WATERMAIN JOINTS WILL BE AS FAR AS POSSIBLE FROM THE OTHER PIPELINE. ALTERNATIVELY, AT SUCH CROSSINGS, THE PIPES SHALL BE ARRANGED SO THAT ALL WATERMAIN JOINTS ARE AT LEAST THREE FEET FROM ALL JOINTS IN VACUUM-TYPE SANITARY SEWERS, STORM SEWERS, STORM WATER FORCEMANS, OR PIPELINES CONVEYING RECLAIMED WATER REGULATED UNDER CHAPTER 62-610, F.A.C., AND AT LEAST SIX FEET FROM ALL JOINTS IN GRAVITY- OR PRESSURE-TYPE SANITARY SEWERS, WASTEWATER FORCEMANS, OR RECLAIMED WATERMANS NOT REGULATED UNDER PART OF CHAPTER 62-610, F.A.C.
3. SEPARATION BETWEEN WATERMANS AND SANITARY OR STORM SEWER MANHOLES:
 - 3.1. NO WATERMAIN SHALL PASS THROUGH, OR COME INTO CONTACT WITH, ANY PART OF A SEWER OR STORMWATER MANHOLE. CONFLICT MANHOLES ARE PROHIBITED.
4. SEPARATION BETWEEN FIRE HYDRANT DRAINS AND SANITARY OR STORM SEWERS, WASTEWATER OR STORM WATER FORCEMANS, RECLAIMED WATER PIPELINES, AND ON-SITE SEWAGE TREATMENT AND DISPOSAL SYSTEMS. NEW OR RELOCATED FIRE HYDRANTS WITH UNDERGROUND DRAINS SHALL BE LOCATED SO THAT THE DRAINS ARE AT LEAST THREE FEET FROM ANY EXISTING OR PROPOSED STORM SEWER, STORM WATER FORCEMAIN, OR RECLAIMED WATERMANS REGULATED UNDER PART OF CHAPTER 62-610, F.A.C.; AT LEAST THREE FEET, AND PREFERABLY TEN FEET, FROM ANY EXISTING OR PROPOSED VACUUM-TYPE SANITARY SEWER; AT LEAST SIX FEET, AND PREFERABLY TEN FEET, FROM ANY EXISTING OR PROPOSED GRAVITY- OR PRESSURE-TYPE SANITARY SEWER, WASTEWATER FORCEMAIN, OR RECLAIMED WATERMAIN NOT REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C.; AND AT LEAST TEN FEET FROM ANY EXISTING OR PROPOSED "ON-SITE SEWAGE TREATMENT AND DISPOSAL SYSTEM" AS DEFINED IN SECTION 381.0065(2), F.S., AND RULE 64E-6.002, F.A.C.
5. EXCEPTIONS: WHERE IT IS NOT TECHNICALLY FEASIBLE OR ECONOMICALLY SENSIBLE TO COMPLY WITH THE REQUIREMENTS IN SUBSECTION 1. OR 2. ABOVE, SJCUD SHALL ALLOW EXCEPTIONS TO THESE REQUIREMENTS IF SUPPLIERS OF WATER OR CONSTRUCTION PERMIT APPLICANTS PROVIDE TECHNICAL OR ECONOMIC JUSTIFICATION FOR EACH EXCEPTION AND PROVIDE ALTERNATIVE CONSTRUCTION FEATURES THAT AFFORD A SIMILAR LEVEL OF RELIABILITY AND PUBLIC HEALTH PROTECTION. ACCEPTABLE ALTERNATIVE CONSTRUCTION FEATURES INCLUDE THE FOLLOWING:
 - 5.1. WHERE AN UNDERGROUND WATERMAIN IS BEING LAID LESS THAN THE REQUIRED MINIMUM HORIZONTAL DISTANCE FROM ANOTHER PIPELINE AND WHERE AN UNDERGROUND WATERMAIN IS CROSSING ANOTHER PIPELINE AND JOINTS IN THE WATERMAIN ARE BEING LOCATED LESS THAN THE REQUIRED MINIMUM DISTANCE FROM JOINTS IN THE OTHER PIPELINE:
 - 5.1.1. USE OF PRESSURE-RATED PIPE CONFORMING TO THE AWWA STANDARDS INCORPORATED INTO RULE 62-555.330, F.A.C., FOR THE OTHER PIPELINE IF IT IS A GRAVITY- OR VACUUM-TYPE PIPELINE;
 - 5.1.2. USE OF WELDED, FUSED, OR OTHERWISE RESTRAINED JOINTS FOR EITHER THE WATERMAIN OR THE OTHER PIPELINE; OR
 - 5.1.3. USE OF WATERTIGHT CASING PIPE OR CONCRETE ENCASEMENT AT LEAST FOUR INCHES THICK FOR EITHER THE WATERMAIN OR THE OTHER PIPELINE.
 - 5.2. WHERE AN UNDERGROUND WATERMAIN IS BEING LAID LESS THAN THREE FEET HORIZONTALLY FROM ANOTHER PIPELINE AND WHERE AN UNDERGROUND WATERMAIN IS CROSSING ANOTHER PIPELINE AND IS BEING LAID LESS THAN THE REQUIRED MINIMUM VERTICAL DISTANCE FROM THE OTHER PIPELINE:
 - 5.2.1. USE OF PIPE, OR CASING PIPE, HAVING HIGH IMPACT STRENGTH (I.E., HAVING AN IMPACT STRENGTH AT LEAST EQUAL TO THAT OF 0.25-INCH-THICK DUCTILE IRON PIPE) OR CONCRETE ENCASEMENT AT LEAST FOUR INCHES THICK FOR THE WATERMAIN; AND
 - 5.2.2. USE OF PIPE, OR CASING PIPE, HAVING HIGH IMPACT STRENGTH (I.E., HAVING AN IMPACT STRENGTH AT LEAST EQUAL TO THAT OF 0.25-INCH-THICK DUCTILE IRON PIPE) OR CONCRETE ENCASEMENT AT LEAST FOUR INCHES THICK FOR THE OTHER PIPELINE IF IT IS NEW AND IS A FORCEMAIN OR RECLAIMED WATERMAIN."

NO.	BY	DATE	SYMBOL	REVISIONS	DESIGNER:	DESIGN ENGINEER				NO. SHEETS
6.					DRAWN BY:					SHEET NO.
5.					DATE:					
4.					CHECKED BY:	FLORIDA REGISTRATION NO.				
3.					DATE:					
2.	SJCUD	2025		REVISION 2						DRAWING NO.
1.	SJCUD	2020		REVISION 1						GN-01



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